## **ABSTRACT**

The invention relates to a circuit for producing potentially separated synchronization (sync) impulses from an alternating voltage network. In a voltage divider for the switch input of a semiconductor switch which is applied to a rectified network voltage by means of a half-wave rectifier, the emitter diode of an optical fiber coupler is switched to the working circuit of the switch which is serially connected with said emitter diode and comprises a preresistor making it possible to periodically charge a storage capacitor which is dischargeable by the emitter diode. At least one transistor is connected downstream of the receiving element of the optical fiber coupler which is powered by a voltage source galvanically separated from the network and whose substantially rectangular synchronization impulses are provided in the working circuit.